

SEQUENCE LISTING

<110> Kharbanda, Surrender
Kufe, Donald

<120> Modulation of Interaction of MUC1 with MUC1 Ligands

<130> ILEX:094WO

<140> Unknown

<141> 2004-10-21

<150> 60/514,198

<151> 2003-10-24

<150> 60/519,822

<151> 2003-11-12

<160> 71

<170> PatentIn version 3.3

<210> 1

<211> 164

<212> PRT

<213> Homo sapiens

<400> 1

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
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Val Leu Thr Ala Thr Thr Ala Pro Lys Pro Ala Thr Val Val Thr Gly
20 25 30

Ser Gly His Ala Ser Ser Thr Pro Gly Gly Glu Lys Glu Thr Ser Ala
35 40 45

Thr Gln Arg Ser Ser Val Pro Ser Ser Thr Glu Lys Asn Ala Phe Asn
50 55 60

Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Leu Gln Arg
65 70 75 80

Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Gly Phe Leu
85 90 95

Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val Gln Leu
100 105 110

Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Met Glu Thr
115 120 125

Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr
 130 135 140

Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln
 145 150 155 160

Ser Gly Ala Gly

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<213> Homo sapiens

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attaagttca ggccaggatc tgtggtgta caattgactc tggccttccg agaaggtacc 360
atcaatgtcc acgacatgga gacacagttc aatcagtata aaacggaagc agcctctcgaa 420
tataacctga cgatctcaga cgtcagcgtg agtgatgtgc catttccttt ctctgcccag 480
tctggggctg gg 492

<210> 3
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<212> PRT
<213> Homo sapiens

<400> 3

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
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Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
 20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
 35 40 45

Thr Glu Lys Asn Ala Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp
 50 55 60

Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile

65	70	75	80
Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro			
85	90	95	

Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile
100 105 110

Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val
130 135 140

Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
145 150 155

<210> 4
<211> 465
<212> DNA
<213> *Homo sapiens*

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cagagaagtt cagtgcccg ctctactgag aagaatgctt ttaattcctc tctggaagat 180
cccagcacccg actactacca agagctgcag agagacattt ctgaaatgtt tttgcagatt 240
tataaacaag ggggttttct gggcctctcc aatattaagt tcagggccagg atctgtggtg 300
gtacaattga ctctggcctt ccgagaaggt accatcaatg tccacgacat ggagacacag 360
ttcaatcagt ataaaacgga agcagcctct cgatataacc tgacgatctc agacgtcagc 420
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<210> 5
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Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Leu Thr
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20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
 35 40 45

Thr Glu Lys Asn Ala Leu Ser Thr Gly Val Ser Phe Phe Phe Leu Ser
 50 55 60

Phe His Ile Ser Asn Leu Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser
 65 70 75 80

Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu
 85 90 95

Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe
 100 105 110

Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly
 115 120 125

Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr
 130 135 140

Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser
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Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
 165 170

<210> 6
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<212> DNA
<213> Homo sapiens

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cagagaagtt cagtgcccag ctctactgag aagaatgctc tgtctactgg ggtctcttc 180
ttttccctgt ctttcacat ttcaaaccctc cagtttaatt cctctctgga agatcccaac 240
accgactact accaagagct gcagagagac atttctgaaa tgttttgca gatttataaa 300
caagggggtt ttctgggcct ctccaatatt aagttcaggc caggatctgt ggtggtacaa 360
ttgactctgg ccttccgaga aggtaccatc aatgtccacg acatggagac acagttcaat 420
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gatgtgccat ttcccttctc tgcccagtct ggggctggg 519

<210> 7
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<212> PRT
<213> Homo sapiens

<400> 7

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Leu Thr
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Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Thr
35 40 45

Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln
50 55 60

Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg
65 70 75 80

Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr
85 90 95

Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu
100 105 110

Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp
115 120 125

Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
130 135 140

<210> 8
<211> 420
<212> DNA
<213> Homo sapiens

<400> 8

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cagagaagtt cagtgccca ag caccgactac taccaagagc tgcagagaga catttctgaa	180
atgttttgc agatttataa acaagggggt tttctgggcc tctccaatat taagttcagg	240
ccaggatctg tggtggtaca attgactctg gccttccgag aaggtaccat caatgtccac	300
gacatggaga cacagttcaa tcagtataaa acggaagcag cctctcgata taacctgacg	360

atctcagacg tcagcgtgag tcatgtgccca tttcctttct ctgcccagtc tggggctggg 420

<210> 9
<211> 130
<212> PRT
<213> Homo sapiens

<400> 9

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Thr
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Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
35 40 45

Thr Glu Lys Asn Ala Ile Pro Ala Pro Thr Thr Lys Ser Cys Arg
50 55 60

Glu Thr Phe Leu Lys Trp Pro Gly Ser Val Val Val Gln Leu Thr Leu
65 70 75 80

Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe
85 90 95

Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser
100 105 110

Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly
115 120 125

Ala Gly
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<210> 10
<211> 390
<212> DNA
<213> Homo sapiens

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cagagaagtt cagtccccag ctctactgag aagaatgcta tcccagcacc gactactacc 180
aagagctgca gagagacatt tctgaaatgg ccaggatctg tgggtgtaca attgactctg 240
gccttccgag aaggtaccat caatgtccac gacatggaga cacagttcaa tcagtataaa 300

acggaagcag cctctcgata taacctgacg atctcagacg tcagcgtgag tgatgtgcca 360
 tttccttct ctgcccagtc tggggctggg 390

<210> 11
 <211> 102
 <212> PRT
 <213> Homo sapiens
 <400> 11

Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Leu
 1 5 10 15

Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Gly
 20 25 30

Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val Val
 35 40 45

Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val
 50 55 60

Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn
 65 70 75 80

Leu Thr Ile Ser Asp Val Ser Val Asp Val Pro Phe Pro Phe Ser
 85 90 95

Ala Gln Ser Gly Ala Gly
 100

<210> 12
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 <212> DNA
 <213> Homo sapiens
 <400> 12
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 gtccacgaca tggagacaca gttcaatcag tataaaacgg aagcagcctc tcgatataac 240
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<210> 13

<211> 375
<212> PRT
<213> Homo sapiens

<400> 13

Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Leu Thr
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Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
20 25 30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
35 40 45

Thr Glu Lys Asn Ala Val Ser Met Thr Ser Ser Val Leu Ser Ser His
50 55 60

Ser Pro Gly Ser Gly Ser Ser Thr Thr Gln Gly Gln Asp Val Thr Leu
65 70 75 80

Ala Pro Ala Thr Glu Pro Ala Ser Gly Ser Ala Ala Thr Trp Gly Gln
85 90 95

Asp Val Thr Ser Val Pro Val Thr Arg Pro Ala Leu Gly Ser Thr Thr
100 105 110

Pro Pro Ala His Asp Val Thr Ser Ala Pro Asp Asn Lys Pro Ala Pro
115 120 125

Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr
130 135 140

Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser
145 150 155 160

Ala Pro Asp Asn Arg Pro Ala Leu Gly Ser Thr Ala Pro Pro Val His
165 170 175

Asn Val Thr Ser Ala Ser Gly Ser Ala Ser Gly Ser Ala Ser Thr Leu
180 185 190

Val His Asn Gly Thr Ser Ala Arg Ala Thr Thr Thr Pro Ala Ser Lys
195 200 205

Ser Thr Pro Phe Ser Ile Pro Ser His His Ser Asp Thr Pro Thr Thr
210 215 220

Leu Ala Ser His Ser Thr Lys Thr Asp Ala Ser Ser Thr His His Ser
 225 230 235 240

Thr Val Pro Pro Leu Thr Ser Ser Asn His Ser Thr Ser Pro Gln Leu
 245 250 255

Ser Thr Gly Val Ser Phe Phe Leu Ser Phe His Ile Ser Asn Leu
 260 265 270

Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu
 275 280 285

Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly
 290 295 300

Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val
 305 310 315 320

Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp
 325 330 335

Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr
 340 345 350

Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe
 355 360 365

Ser Ala Gln Ser Gly Ala Gly
 370 375

<210> 14

<211> 1125

<212> DNA

<213> Homo sapiens

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cagagaagtt cagtccccag ctctactgag aagaatgtg tgagtatgac cagcagcgta	180
ctctccagcc acagccccgg ttcaggctcc tccaccactc agggacagga tgtcactctg	240
gccccggcca cgaaaccagc ttcaagggttca gctgccacct ggggacagga tgtcacctcg	300
gtcccagtca ccaggccagc cctgggctcc accaccccgca cagcccacga tgtcacctca	360
gccccggaca acaagccagc cccgggctcc accgcccccc cagcccacgg tgtcacctcg	420

gccccggaca ccaggccggc cccgggctcc accggccccc cagcccatgg tgtcacctcg	480
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actcctacca cccttgccag ccatagcacc aagactgatg ccagtagcac tcaccatagc	720
acggtacctc ctctcacctc ctccaatcac agcaattctc cccagttgtc tactgggtc	780
tctttctttt tcctgtcttt tcacatttca aacctccagt ttaattcctc tctggaagat	840
cccagcacccg actactacca agagctgcag agagacattt ctgaaaatgtt tttcagatt	900
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gtacaattga ctctggcctt ccgagaaggt accatcaatg tccacgacgt ggagacacag	1020
ttcaatcagt ataaaacgga agcagcctct cgatataacc tgacgatctc agacgtcagc	1080
gtgagtgtatg tgccatttcc tttctctgcc cagtctgggg ctggg	1125

<210> 15
<211> 337
<212> PRT
<213> Homo sapiens

<400> 15

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Val Leu Thr Val Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly		
20	25	30

Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser		
35	40	45

Thr Glu Lys Asn Ala Val Ser Met Thr Ser Ser Val Leu Ser Ser His		
50	55	60

Ser Pro Gly Ser Gly Ser Ser Thr Thr Gln Gly Gln Asp Val Thr Leu			
65	70	75	80

Ala Pro Ala Thr Glu Pro Ala Ser Gly Ser Ala Ala Thr Trp Gly Gln		
85	90	95

Asp Val Thr Ser Val Pro Val Thr Arg Pro Ala Leu Gly Ser Thr Thr		
100	105	110

Pro Pro Ala His Asp Val Thr Ser Ala Pro Asp Asn Lys Asn Arg Pro

115

120

125

Ala Leu Gly Ser Thr Ala Pro Pro Val His Asn Val Thr Ser Ala Ser
130 135 140

Gly Ser Ala Ser Gly Ser Ala Ser Thr Leu Val His Asn Gly Thr Ser
145 150 155 160

Ala Arg Ala Thr Thr Pro Ala Ser Lys Ser Thr Pro Phe Ser Ile
165 170 175

Pro Ser His His Ser Asp Thr Pro Thr Thr Leu Ala Ser His Ser Thr
180 185 190

Lys Thr Asp Ala Ser Ser Thr His His Ser Thr Val Pro Pro Leu Thr
195 200 205

Ser Ser Asn His Ser Thr Ser Pro Gln Leu Ser Thr Gly Val Ser Phe
210 215 220

Phe Phe Leu Ser Phe His Ile Ser Asn Leu Gln Phe Asn Ser Ser Leu
225 230 235 240

Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser
245 250 255

Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser
260 265 270

Asn Ile Lys Phe Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala
275 280 285

Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn
290 295 300

Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp
305 310 315 320

Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala
325 330 335

Gly

<210> 16
<211> 1011

<212> DNA
<213> Homo sapiens

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catagcacgg tacctcctct cacccctcc aatcacagca cttctccccca gttgtctact 660
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gaagatccca gcaccgacta ctaccaagag ctgcagagag acatttctga aatgttttg 780
cagatttata aacaaggggg ttttctggc ctctccaata ttaagttcag gccaggatct 840
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acacagttca atcagtataa aacggaagca gcctctcgat ataacctgac gatctcagac 960
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<210> 17
<211> 175
<212> PRT
<213> Homo sapiens

<400> 17

Ala	Thr	Thr	Thr	Pro	Ala	Ser	Lys	Ser	Thr	Pro	Phe	Ser	Ile	Pro	Ser
1															
															15

His	His	Ser	Asp	Thr	Pro	Thr	Thr	Leu	Ala	Ser	His	Ser	Thr	Lys	Thr
															30

Asp	Ala	Ser	Ser	Thr	His	His	Ser	Thr	Val	Pro	Pro	Leu	Thr	Ser	Ser
															45

Asn	His	Ser	Thr	Ser	Pro	Gln	Leu	Ser	Thr	Gly	Val	Ser	Phe	Phe	Phe
															50
															55
															60

Leu Ser Phe His Ile Ser Asn Leu Gln Phe Asn Ser Ser Leu Glu Asp
 65 70 75 80

Pro Ser Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp Ile Ser Glu Met
 85 90 95

Phe Leu Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly Leu Ser Asn Ile
 100 105 110

Lys Phe Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg
 115 120 125

Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr
 130 135 140

Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser
 145 150 155 160

Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
 165 170 175

<210> 18
<211> 525
<212> DNA
<213> Homo sapiens

<400> 18
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acggtaacctc ctctcaccc tcccaatcac agcaattctc cccagttgtc tactgggttc 180
tctttctttt tcctgtcttt tcacattca aacctccagt ttaattcctc tctggaagat 240
cccagcacccg actactacca agagctgcag agagacattt ctgaaatgtt tttgcagatt 300
tataaacaag ggggtttctt gggcctctcc aatattaagt tcaggccagg atctgtggtg 360
gtacaattga ctctggcctt ccgagaaggt accatcaatg tccacgacgt ggagacacag 420
ttcaatcagt ataaaacgga agcagcctct cgatataacc tgacgatctc agacgtcagc 480
gtgagtgatg tgccatttcc tttctctgcc cagtcgtggg ctgggg 525

<210> 19
<211> 58
<212> PRT
<213> Homo sapiens

<400> 19

Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn
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Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala
 20 25 30

Ser Arg Tyr Asn Leu Thr. Ile Ser Asp Val Ser Val Ser Asp Val Pro
 35 40 45

Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly
 50 55

<210> 20
 <211> 174
 <212> DNA
 <213> Homo sapiens

<400> 20
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 gagacacagt tcaatcagta taaaacggaa gcagcctctc gatataacct gacgatctca 120
 gacgtcagcg tgagtgatgt gccatttcct ttctctgccc agtctggggc tggg 174

<210> 21
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 21

Ser Val Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn
 1 5 10 15

Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala
 20 25 30

Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val Pro
 35 40 45

Phe Pro
 50

<210> 22
 <211> 150
 <212> DNA
 <213> Homo sapiens

<400> 22
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 gagacacagt tcaatcagta taaaacggaa gcagcctctc gatataacct gacgatctca 120

gacgtcagcg tgagtatgt gccatttcct 150

 <210> 23
 <211> 49
 <212> PRT
 <213> Homo sapiens

 <400> 23

 Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn
 1 5 10 15

 Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp
 20 25 30

 Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala
 35 40 45

 Gly

 <210> 24
 <211> 147
 <212> DNA
 <213> Homo sapiens

 <400> 24
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 <210> 25
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 <212> PRT
 <213> Homo sapiens

 <400> 25

 Leu Ser Thr Gly Val Ser Phe Phe Phe Leu Ser Phe His Ile Ser Asn
 1 5 10 15

 Leu Gln Phe Asn Ser Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln
 20 25 30

 Glu Leu Gln Arg Asp Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln
 35 40 45

 Gly Gly Phe Leu Gly Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val
 50 55 60

Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His
 65 70 75 80

Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg
 85 90 95

Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro
 100 105 110

Phe Ser Ala Gln Ser Gly Ala Gly
 115 120

<210> 26
<211> 360
<212> DNA
<213> Homo sapiens

<400> 26
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atgttttgc agatttataa acaagggggt tttctggcc tctccaatat taagttcagg 180
ccaggatctg tggtggtaca attgactctg gccttccgag aaggtaccat caatgtccac 240
gacatggaga cacagttcaa tcagtataaa acggaagcag cctctcgata taacctgacg 300
atctcagacg tcagcgtgag tgatgtgcc a ttcccttct ctgcccagtc tggggctggg 360

<210> 27
<211> 77
<212> PRT
<213> Homo sapiens

<400> 27

Ile Pro Ala Pro Thr Thr Lys Ser Cys Arg Glu Thr Phe Leu Lys
 1 5 10 15

Trp Pro Gly Ser Val Val Gln Leu Thr Leu Ala Phe Arg Glu Gly
 20 25 30

Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn Gln Tyr Lys Thr
 35 40 45

Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp Val Ser Val Ser
 50 55 60

Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala Gly

65

70

75

<210> 28
<211> 231
<212> DNA
<213> Homo sapiens

<400> 28
atcccagcac cgactactac caagagctgc agagagacat ttctgaaatg gccaggatct 60
gtggtgttac aattgactct ggccttccga gaaggtacca tcaatgtcca cgacatggag 120
acacagttca atcagtataa aacggaagca gcctctcgat ataacctgac gatctcagac 180
gtcagcgtga gtgtatgtgcc atttccttgc tctgcccagt ctggggctgg g 231

<210> 29
<211> 112
<212> PRT
<213> Homo sapiens

<400> 29

Leu	Ser	Thr	Gly	Val	Ser	Phe	Phe	Phe	Leu	Ser	Phe	His	Ile	Ser	Asn
1				5					10				15		

Leu	Gln	Phe	Asn	Ser	Ser	Leu	Glu	Asp	Pro	Ser	Thr	Asp	Tyr	Tyr	Gln
						20			25				30		

Glu	Leu	Gln	Arg	Asp	Ile	Ser	Glu	Met	Phe	Leu	Gln	Ile	Tyr	Lys	Gln
						35			40				45		

Gly	Gly	Phe	Leu	Gly	Leu	Ser	Asn	Ile	Lys	Phe	Arg	Pro	Gly	Ser	Val
						50			55			60			

Val	Val	Gln	Leu	Thr	Leu	Ala	Phe	Arg	Glu	Gly	Thr	Ile	Asn	Val	His
65					70				75				80		

Asp	Val	Glu	Thr	Gln	Phe	Asn	Gln	Tyr	Lys	Thr	Glu	Ala	Ala	Ser	Arg
						85			90				95		

Tyr	Asn	Leu	Thr	Ile	Ser	Asp	Val	Ser	Val	Ser	Asp	Val	Pro	Phe	Pro
						100			105				110		

<210> 30
<211> 336
<212> DNA
<213> Homo sapiens

<400> 30
ctgtctactg gggctctttt ctttttcctg tcttttcaca tttcaaacct ccagttaat 60

tcctctctgg aagatcccag caccgactac taccaagagc tgcagagaga catttctgaa 120
 atgttttgc agatttataa acaagggggt tttctgggcc tctccaatat taagttcagg 180
 ccaggatctg tggtgttaca attgactctg gccttccgag aaggtaaccat caatgtccac 240
 gacatggaga cacagttcaa tcagtataaa acggaagcag cctctcgata taacctgacg 300
 atctcagacg tcagcgttag tgatgtgcca ttccct 336

<210> 31
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 31

Ile	Pro	Ala	Pro	Thr	Thr	Lys	Ser	Cys	Arg	Glu	Thr	Phe	Leu	Lys
1				5				10				15		

Trp	Pro	Gly	Ser	Val	Val	Val	Gln	Leu	Thr	Leu	Ala	Phe	Arg	Glu	Gly
				20				25				30			

Thr	Ile	Asn	Val	His	Asp	Val	Glu	Thr	Gln	Phe	Asn	Gln	Tyr	Lys	Thr
				35			40				45				

Glu	Ala	Ala	Ser	Arg	Tyr	Asn	Leu	Thr	Ile	Ser	Asp	Val	Ser	Val	Ser
				50			55				60				

Asp Val
65

<210> 32
 <211> 198
 <212> DNA
 <213> Homo sapiens

<400> 32

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acacagttca	atcagtataa	aacggaagca	gcctctcgat	ataacctgac	gatctcagac	180
gtcagcgtga	gtgatgtg					198

<210> 33
 <211> 232
 <212> PRT
 <213> HS

<400> 33

Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala

1	5	10	15
Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro			
20	25	30	
Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val			
35	40	45	
Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val			
50	55	60	
Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln			
65	70	75	80
Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln			
85	90	95	
Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala			
100	105	110	
Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro			
115	120	125	
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr			
130	135	140	
Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser			
145	150	155	160
Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr			
165	170	175	
Lys Thr Thr Pro Pro Val Leu Asp Ser Val Gly Ser Phe Phe Leu Tyr			
180	185	190	
Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe			
195	200	205	
Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys			
210	215	220	
Ser Leu Ser Leu Ser Pro Gly Lys			
225	230		

<210> 34
<211> 699

<212> DNA

<213> HS

<400> 34

gagcccaaat	cttgtacaa	aactcacaca	tgcccaccgt	gcccagcacc	tgaactcctg	60
gggggaccgt	cagtcttcct	cttccccca	aaacccaagg	acaccctcat	gatctcccg	120
acccctgagg	tcacatgcgt	ggtggtggac	gtgagccacg	aagaccctga	ggtcaagttc	180
aactggtacg	tggacggcgt	ggaggtgcat	aatgccaaga	caaagccgcg	ggaggagcag	240
tacaacagca	cgtaccgtgt	ggtcagcgtc	ctcaccgtcc	tgcaccagga	ctggctgaat	300
ggcaaggagt	acaagtgc当地	ggtctccaac	aaagccctcc	cagccccat	cgagaaaacc	360
atctccaaag	ccaaaggc当地	gccccgagaa	ccacaggtgt	acaccctgcc	cccatcccg	420
gatgagctga	ccaagaacca	ggtcagcctg	acctgcctgg	tcaaaggctt	ctatccc当地	480
gacatcgccg	tggagtggg	gagcaatggg	cagccggaga	acaactacaa	gaccacgc当地	540
cccggtctgg	actccgtc当地	ctccttcttc	ctctacagca	agtcaccgt	ggacaagagc	600
aggtggc当地	aggggaacgt	cttctcatgc	tccgtgatgc	atgaggctct	gcacaaccac	660
tacacgc当地	agagcctctc	cctgtctccg	ggtaaatga			699

<210> 35

<211> 230

<212> PRT

<213> HS

<400> 35

Lys	Ser	Cys	Asp	Lys	Pro	His	Thr	Cys	Pro	Leu	Cys	Pro	Ala	Pro	Glu
1				5					10				15		

Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp
				20				25				30			

Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp
		35				40					45				

Val	Ser	His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly
					50			55			60				

Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn
65						70			75				80		

Ser	Thr	Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp
				85					90			95			

Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

100

105

110

Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
 115 120 125

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
 130 135 140

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 145 150 155 160

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Ala
 165 170 175

Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 180 185 190

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 195 200 205

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 210 215 220

Ser Leu Ser Pro Gly Lys
 225 230

<210> 36
 <211> 690
 <212> DNA
 <213> HS

<400> 36	
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ccgtcagtct tcctttccc cccaaaaccc aaggacaccc tcatgatctc ccggacccct	120
gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgaggtcaa gttcaactgg	180
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgccggagga gcagtacaac	240
agcacgtacc gtgtggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag	300
gagtacaagt gcaaggtctc caacaaagcc ctcccagccc ccatcgagaa aaccatctcc	360
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgccccatc ccgggatgag	420
ctgaccaaga accaggtcag cctgacctgc ctagtcaaag gcttctatcc cagcgacatc	480
gccgtggagt gggagagcaa tggcagccg gagaacaact acaaggccac gcctccctg	540
ctggactccg acggctcatt cttccctctac agcaagctca ccgtggacaa gagcaggtgg	600

cagcagggga acgtttctc atgctccgtg atgcattgagg ctctgcacaa ccactacacg 660
 cagaagagcc tctccctgtc tccggtaaa 690

<210> 37
<211> 228
<212> PRT
<213> HS

<400> 37

Glu	Arg	Lys	Cys	Cys	Val	Glu	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Pro	Val
1					5			10				15			

Ala	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu
								25					30		

Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser
								40					45		

His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Met	Glu
						50		55				60			

Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Gln	Phe	Asn	Ser	Thr	
65						70			75			80			

Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Val	His	Gln	Asp	Trp	Leu	Asn
									85		90		95		

Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Gly	Leu	Pro	Ala	Pro
								100		105		110			

Ile	Glu	Lys	Thr	Ile	Ser	Lys	Thr	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln
								115		120		125			

Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met	Thr	Lys	Asn	Gln	Val
								130		135		140			

Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val
						145		150			155		160		

Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro
								165		170		175			

Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr
								180		185		190			

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val

195

200

205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
 210 215 220

Ser Pro Gly Lys
 225

<210> 38
<211> 687
<212> DNA
<213> HS

<400> 38
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acgtgcgtgg tggtggacgt gagccacgaa gaccccgagg tccagttcaa ctggtacgtg 180
gacggcatgg aggtgcataa tgccaagaca aagccacggg aggagcagtt caacagcacg 240
ttccgtgtgg tcagcgtcct caccgtcgtg caccaggact ggctgaacgg caaggagtac 300
aagtgcagg tctccaacaa aggccccc gccccatcg agaaaaccat ctccaaaacc 360
aaagggcagc cccgagaacc acaggtgtac accctgcccc catcccgga ggagatgacc 420
aagaaccagg tcagcctgac ctgcctggc aaaggcttct accccagcga catgcccgtg 480
gagtggaga gcaatggca gccggagaac aactacaaga ccacacctcc catgctggac 540
tccgacggct cttcttcct ctacagcaag ctcaccgtgg acaagagcag gtggcagcag 600
gggaacgtct tctcatgctc cgtgatgcat gaggctctgc acaaccacta cacacagaag 660
gcctctccc tgtctccggg taaatga 687

<210> 39
<211> 229
<212> PRT
<213> Homo Sapiens

<400> 39

Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe
 1 5 10 15

Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
 20 25 30

Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
 35 40 45

Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val
 50 55 60

Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser
 65 70 75 80

Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 85 90 95

Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ser
 100 105 110

Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 115 120 125

Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr Lys Asn Gln
 130 135 140

Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
 145 150 155 160

Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
 165 170 175

Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu
 180 185 190

Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn Val Phe Ser Cys Ser
 195 200 205

Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
 210 215 220

Leu Ser Leu Gly Lys
 225

<210> 40
 <211> 690
 <212> DNA
 <213> HS

<400> 40		
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tca gtc当地cc tgg tccccc aaaacccaag gacactctca tgatctcccg gaccctgag		120
gtcacgtgcg tgg tgg tgg a cgt gag ccag gaagaccccg agtccagtt caactgg tac		180
gtggatggcg tgg gag gtgca taat gccaag acaaagccgc gggaggagca gttcaacagc		240

acgtaccgtg tggtcagcgt cctcaccgtc ctgcaccagg actggctgar cgccaaggag 300
 tacaagtgc aaggctccar caaaggcctc ccgtcctcca tcgagaaaac catctccaam 360
 gcccggc agccccgaga gccacaggtg tacaccctgc cccatccca ggaggagatg 420
 accaagaacc aggtcagcct gacctgcctg gtcaaaggct tctaccccag cgacatcgcc 480
 gtggagtgaa agagcaatgg gcagccggag aacaactaca agaccacgcc tcccgtgctg 540
 gactccgacg gctccttctt cctctacagc aggctaaccg tggacaagag cagktggcag 600
 gaggggaatg tcttctcatg ctccgtgatg catgaggctc tgcacaacca ctacacacag 660
 aagagcctct ccctgtctct gggtaaatga 690

<210> 41
 <211> 585
 <212> PRT
 <213> HS

<400> 41

Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly Glu
 1 5 10 15

Glu Asn Phe Lys Ala Leu Val Leu Ile Ala Phe Ala Gln Tyr Leu Gln
 20 25 30

Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
 35 40 45

Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
 50 55 60

Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65 70 75 80

Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
 85 90 95

Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
 100 105 110

Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
 115 120 125

Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
 130 135 140

Arg His Pro Tyr Phe Tyr Ala Pro Gln Leu Leu Phe Phe Ala Lys Arg
145 150 155 160

Tyr Lys Ala Ala Phe Thr Glu Cys Cys Gln Ala Ala Asp Lys Ala Ala
165 170 175

Cys Leu Leu Pro Lys Leu Asp Glu Leu Arg Asp Glu Gly Lys Ala Ser
180 185 190

Ser Ala Lys Gln Arg Leu Lys Cys Ala Ser Leu Gln Lys Phe Gly Glu
195 200 205

Arg Ala Phe Lys Ala Trp Ala Val Ala Arg Leu Ser Gln Arg Phe Pro
210 215 220

Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val Thr Asp Leu Thr Lys
225 230 235 240

Val His Thr Glu Cys Cys His Gly Asp Leu Leu Glu Cys Ala Asp Asp
245 250 255

Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn Gln Asp Ser Ile Ser
260 265 270

Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu Leu Glu Lys Ser His
275 280 285

Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro Ala Asp Leu Pro Ser
290 295 300

Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val Cys Lys Asn Tyr Ala
305 310 315 320

Glu Ala Lys Asp Val Phe Leu Gly Met Phe Leu Tyr Glu Tyr Ala Arg
325 330 335

Arg His Pro Asp Tyr Ser Val Val Leu Leu Leu Arg Leu Ala Lys Thr
340 345 350

Tyr Glu Thr Thr Leu Glu Lys Cys Cys Ala Ala Pro Asp Pro His Glu
355 360 365

Cys Tyr Ala Lys Val Phe Asp Glu Phe Lys Pro Leu Met Glu Glu Pro
370 375 380

Gln Asn Leu Ile Lys Gln Asn Cys Glu Leu Phe Glu Gln Leu Gly Glu

385

390

395

400

Tyr Lys Phe Gln Asn Ala Leu Leu Val Arg Tyr Thr Lys Lys Val Pro
 405 410 415

Gln Val Ser Thr Pro Thr Leu Val Glu Val Ser Arg Asn Leu Gly Lys
 420 425 430

Val Gly Ser Lys Cys Cys Lys His Pro Glu Ala Lys Arg Met Pro Cys
 435 440 445

Ala Glu Asp Tyr Leu Ser Val Val Leu Asn Gln Leu Cys Val Leu His
 450 455 460

Glu Lys Thr Pro Val Ser Asp Arg Val Thr Lys Cys Cys Thr Glu Ser
 465 470 475 480

Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu Glu Val Asp Glu Thr
 485 490 495

Tyr Val Pro Lys Glu Phe Asn Ala Glu Thr Phe Thr Phe His Ala Asp
 500 505 510

Ile Cys Thr Leu Ser Glu Lys Glu Arg Gln Ile Lys Lys Gln Thr Ala
 515 520 525

Leu Val Glu Leu Val Lys His Lys Pro Lys Ala Thr Lys Glu Gln Leu
 530 535 540

Lys Ala Val Met Asp Asp Phe Ala Ala Phe Val Glu Lys Cys Cys Lys
 545 550 555 560

Ala Asp Asp Lys Glu Thr Cys Phe Ala Glu Glu Gly Lys Lys Leu Val
 565 570 575

Ala Ala Ser Gln Ala Ala Leu Gly Leu
 580 585

<210> 42
 <211> 1758
 <212> DNA
 <213> HS

<400> 42
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aaatttagtga atgaagtaac tgaatttgca aaaacatgtg ttgctgatga gtcagctgaa	180
aatttgtaca aatcacttca taccctttt ggagacaaaat tatgcacagt tgcaactctt	240
cgtgaaacct atggtaaaat ggctgactgc tgtgcaaaac aagaacctga gagaaatgaa	300
tgcttcttgc aacacaaaaga tgacaatcca aatctcccc gattggtgag accagaggtt	360
gatgtgatgt gcactgcttt tcatgacaat gaagagacat ttttggaaaa atacttat	420
gaaattgcca gaagacatcc ttacttttat gccccgcaac tcctttctt tgctaaaagg	480
tataaagctg ctttacaga atgttgc当地 gctgctgata aagcagcctg cctgttgc当地	540
aagctcgatg aacttcggga tgaagggaaag gcttcgtctg ccaaacagag actcaagtgt	600
gccagtctcc aaaaatttgg agaaagagct ttcaaagcat gggcagtagc tcgcctgagc	660
cagagatttc ccaaagctga gtttgcagaa gtttccaagt tagtgc当地 tcttacccaa	720
gtcccacacgg aatgctgcca tggagatctg cttgaatgtg ctgatgacag ggcggacctt	780
gccaagtata tctgtgaaaa tcaagattcg atctccagta aactgaagga atgctgtgaa	840
aaacctctgt tgaaaaatc ccactgcatt gccgaagtgg aaaatgtga gatgc当地	900
gacttgc当地 cattagcggc tgatttgtt gaaagtaagg atgttgcaa aaactatgct	960
gaggcaaagg atgtcttctt gggcatgttt ttgtatgaat atgcaagaag gcatcctgat	1020
tactctgtcg tactgctgct gagacttgcc aagacatatg aaaccactct agagaagtgc	1080
tgtgccgctc cagatcctca tgaatgctat gccaaagtgt tcgatgaatt taaaccttctt	1140
atgaaagagc ctcagaattt aatcaaacaa aattgtgagc ttttgagca gcttggagag	1200
tacaaattcc agaatgc当地 attagttcg taccaccaaga aagtacccca agtgtcaact	1260
ccaaactcttgc tagaggtctc aagaaaccta ggaaaagtgg gcagcaaatg ttgtaaacat	1320
cctgaagcaa aaagaatgcc ctgtgc当地 gactatctat ccgtggctt gaaccaggta	1380
tgtgtgtgc atgaaaaaac gccagtaagt gacagagtca ccaaatgctg cacagaatcc	1440
ttggtaaca ggcgaccatg ctttcagct ctggaaagtgc atgaaacata cgttccaaa	1500
gagtttaatg ctgaaacatt caccttccat gcagatatat gcacacttgc tgagaaggag	1560
agacaaaatca agaaacaaaac tgcacttgc当地 gagcttgc当地 aacacaagcc caaggcaaca	1620
aaagagcaac tgaaagctgt tatggatgtat ttgc当地 gagcttgc当地 ttgttagagaa gtgctgcaag	1680
gctgacgata agaaaacctg ct当地 gccgag gagggtaaaa aacttgc当地 tgcaagtcaa	1740
gctgc当地 tag gcttataa	1758

<210> 43
 <211> 110
 <212> PRT
 <213> Homo Sapiens

<400> 43

Met	Arg	Phe	Met	Thr	Leu	Leu	Phe	Leu	Thr	Ala	Leu	Ala	Gly	Ala	Leu
1															15

Val	Cys	Ala	Tyr	Asp	Pro	Glu	Ala	Ala	Ser	Ala	Pro	Gly	Ser	Gly	Asn
															30
20															25

Pro	Cys	His	Glu	Ala	Ser	Ala	Ala	Gln	Lys	Glu	Asn	Ala	Gly	Glu	Asp
															45
															35

Pro	Gly	Leu	Ala	Arg	Gln	Ala	Pro	Lys	Pro	Arg	Lys	Gln	Arg	Ser	Ser
															50
															55

Leu	Leu	Glu	Lys	Gly	Leu	Asp	Gly	Ala	Lys	Lys	Ala	Val	Gly	Gly	Leu
															65
															70

Gly	Lys	Leu	Gly	Lys	Asp	Ala	Val	Glu	Asp	Leu	Glu	Ser	Val	Gly	Lys
															85
															90

Gly	Ala	Val	His	Asp	Val	Lys	Asp	Val	Leu	Asp	Ser	Val	Leu	
														100
														105

110

<210> 44

<211> 333

<212> DNA

<213> HS

<400> 44

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cagagatcca gcTTCTGGA AAAAGGCCTA gacggagcaa AAAAAGCTGT ggggggactc 240

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35 40 45

Gln Leu Thr Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val
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Glu Thr Gln Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn
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Leu Thr Ile Ser Asp Val Ser Val Asp Val Pro Phe Pro Phe Ser
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Ala Gln Ser Gly Ala Gly Lys Leu Lys Ser Cys Asp Lys Pro His Thr
100 105 110

Cys Pro Leu Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe
115 120 125

Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro
130 135 140

Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val
145 150 155 160

Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr
165 170 175

Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val
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Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys
195 200 205

Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser
210 215 220

Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro
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Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val
245 250 255

Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly
260 265 270

Gln Pro Glu Asn Asn Tyr Lys Ala Thr Pro Pro Val Leu Asp Ser Asp
275 280 285

Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp
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Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His
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